

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): Method for balancing rotors without journals, in which the rotor (2), which has a pocket hole bore (6), is arranged on a bearing mandrel (5) of a balancing device and fluid is brought between rotor and bearing mandrel faces located opposite one another and the rotor (2) is set into rotation, wherein oscillations of the bearing mandrel (5) induced by imbalance are ~~drawn on~~ used to determine the imbalance, wherein the rotor (2) is supported in a first bearing region in the radial direction by means of a liquid and in the bearing arrangement of a rotor (2) which has a pocket hole bore it is supported in a second bearing region in a presettable axial position on the bearing mandrel (5) by supplying fluid to a fluid

chamber (40) positioned between the end of the pocket hole bore and the end of the bearing mandrel.

Claim 2 (previously presented): Method according to claim 1, wherein the presettable axial position of the rotor (2) on the bearing mandrel (5) is set by changing the volume of the fluid chamber (40).

Claim 3 (previously presented): Method according to claim 1, wherein the volume of the fluid chamber (40) is changed by pressure build-up in the fluid chamber (40).

Claim 4 (previously presented): Method according to claim 3, wherein with a rotor (2) held with an axis inclined towards the horizontal plane, the axial position of the rotor (2) on the bearing mandrel (5) is determined by the pressure arising in the fluid chamber (40) owing to the weight component of the rotor (2)

and the pressure of the fluid supply, the pressure in the fluid chamber (40) being limited to a presettable value.

Claim 5 (previously presented): Method according to claim 4, wherein at least one outlet channel is provided between associated rotor and bearing mandrel faces, the flow cross-section of which is changed to limit the pressure.

Claim 6 (currently amended): Method according to claim 1, wherein the support in the first and second bearing regions is performed by means of a liquid, -preferably wherein said liquid is an oil or oily liquid as fluid.

Claim 7 (previously presented): Bearing arrangement with a bearing mandrel (5) for holding a rotor (2), without journals but having a bore, in a balancing device in at least one first and one second bearing region, the bearing mandrel (5) having

orifices for the passage of fluid, wherein first orifices (10) for fluid supply and at least one second orifice (20) for fluid discharge are provided in the bearing mandrel, when holding a rotor (2) having a pocket hole bore the bearing arrangement has a fluid chamber (40) constructed between the end of the pocket hole bore and the end of the bearing mandrel, which has at least one inlet and one outlet channel and the bearing mandrel (5) has at least the outlet channel.

Claim 8 (previously presented): Bearing arrangement according to claim 7, wherein the first orifices (10) are located on bearing mandrel circumferential faces in the first bearing region.

Claim 9 (previously presented): Bearing arrangement according to claim 7, wherein the first orifices (10) are located in two bearing planes (7, 8) of the bearing mandrel (5) at an

axial distance from one another.

Claim 10 (currently amended): Bearing arrangement according to ~~claim 1~~ claim 7, wherein the second orifice (20) is arranged adjacent to the bearing planes (7, 8) and/or between them.

Claim 11 (currently amended): Bearing arrangement according to ~~claim 1~~ claim 7, wherein the inlet channel is formed by the annular gap (42) between the outer circumference of the bearing mandrel and the wall of the bore and/or a bore (43) ending in the end face of the bearing mandrel (5).

Claim 12 (currently amended): Bearing arrangement according to ~~claim 1~~ claim 7, wherein the outlet channel ~~can be connected~~ is connected to the second orifice (20) and is formed by at least one exterior longitudinal groove (41) of the bearing mandrel (5) starting from the end face of the bearing mandrel (5) and/or an

outlet bore.

Claim 13 (previously presented): Bearing arrangement according to claim 12, wherein the outlet orifice of the longitudinal groove (41) connecting the fluid chamber (40) to the second orifice (20) in the bearing mandrel (5) and/or the outlet bore can be covered by the wall of the rotor bore (6).

Claim 14 (currently amended): Bearing arrangement according to ~~claim 1~~ claim 7, wherein inside the pocket hole bore an annular space (44) is constructed between the rotor (2) and the bearing mandrel (5), which is connected to the outlet channel and the second orifice (20).

Claim 15 (previously presented): Bearing arrangement according to claim 14, wherein the annular space (44) is formed on one side by a transition section between a first and a second

section of the pocket hole bore and on the other side by a transition section between a first and a second section of the bearing mandrel (5).

Claim 16 (previously presented): Bearing arrangement according to claim 15, wherein a control edge (45) is formed between the transition section and the section of the pocket hole bore in which the fluid chamber (40) is located.